

Remarks

Claims 1-4, 6, 8 and 11-13 are pending herein. By this Amendment, claims 5, 7, 9 and 10 have been cancelled as being directed to a non-elected invention. In addition, claims 1 and 4 have been cancelled and claims 2, 3, 6, 8 and 11 have been amended.

Claim 11 has been amended in part to include the recitation from claim 1 stating that the thermoplastic polyester composition does not comprise polycarbonate. In addition, claim 11 has been amended to limit the ethylene copolymer (B) to those chosen from ethylene-unsaturated epoxide copolymers (B2). Applicants submit that these amendments do not raise new issues because they incorporate previously-considered limitations into claim 11.

Claims 2, 3, 6 and 8 have been amended to depend upon claim 11 instead of claim 1. Applicants submit that these amendments also do not raise new issues.

Accordingly, Applicants respectfully request entry of this Amendment.

In the Office Action, claims 1-4, 6 and 8 are rejected under 35 U.S.C. §103(a) as being unpatentable over EP '680 and further rejected under §103(a) as being unpatentable over EP '985. Claims 11-13 are rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under §103(a) as obvious over EP '088. Claims 1-4, 6 and 11-13 are rejected under §102(b) as anticipated by or, in the alternative, under §103(a) as obvious over Dunkle.

I. Rejection of Claims 1-4, 6 and 8 under 35 U.S.C. §103(a)

Claims 1-4, 6 and 8 are rejected under 35 U.S.C. §103(a) as being unpatentable over EP '680 and further rejected under §103(a) as being unpatentable over EP '985.

As noted above, claims 1 and 4 have been cancelled, and claims 2, 3, 6 and 8 have been amended to depend upon claim 11. Claim 11 has been amended to state that the thermoplastic polyester composition therein does not contain a polycarbonate and to limit the ethylene copolymer (B) to those chosen from ethylene-unsaturated epoxide copolymers (B2).

Applicants respectfully submit that neither EP '680 nor EP '985 would have rendered instant claims 11, 2, 3, 6 and 8 obvious.

A. EP '680

In the composition set forth in claim 11, the core-shell copolymer (A) is limited to the core and shell components listed in the claim. Claim 11 does not include an ABS core-shell copolymer as the core-shell copolymer (A) used in the claimed composition.

EP '680 requires the presence of an ABS copolymer in the composition therein. At page 1, lines 18-20, EP '680 teaches that:

Surprisingly, it has now been found that a group of specific terpolymers in combination with the ABS polymers show a completely unexpected synergistic effect so that with these combinations good impact values at room temperature can easily be attained at relative low concentrations.

EP '680 does not teach or suggest that a synergistic effect will occur with a core-shell copolymer other than the ABS copolymer. Thus, this reference provides no reason, suggestion or motivation to one skilled in the art to use a different core-shell copolymer.

Therefore, for at least this reason, Applicants submit that claims 11, 2, 3, 6 and 8 would not have been obvious over EP '680.

B. EP '985

EP '985 requires the presence of an acrylonitrile-butadiene copolymer in the composition therein. At page 1, lines 17-21, the reference teaches that:

Surprisingly, it has now been found that a group of specific terpolymers has somewhat better impact modifying properties than the acrylonitrile-butadiene copolymers and terpolymers, and more particularly that combinations of these specific terpolymers with the acrylonitrile-butadiene copolymers and terpolymers show a completely unexpected synergistic action so that with these combinations CNI values at room temperature of 25 J/m² and above can easily be attained.

EP '985 does not teach or suggest that a synergistic effect will occur with a core-shell copolymer other than acrylonitrile-butadiene copolymers. Thus, this reference provides no reason, suggestion or motivation to one skilled in the art to use a different core-shell copolymer.

Therefore, for at least this reason, Applicants submit that claims 11, 2, 3, 6 and 8 would not have been obvious over EP '985.

II. Rejection of Claims 11-13 under 35 U.S.C. §102/35 U.S.C. §103(a)

Claims 11-13 are rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under §103(a) as obvious over EP '008.

EP '008 is cited for disclosing impact modified compositions comprising thermoplastic polyester, core shell impact modifier and an ethylene-unsaturated epoxide copolymer.

EP '008 requires the presence of a polycarbonate in the composition therein. The reference does not teach or suggest a composition in which polycarbonate is not present. Therefore, Applicants submit that EP '008 would not provide one skilled in the art any motivation, suggestion or reason to omit polycarbonate from the composition disclosed therein.

Instant claim 11 excludes polycarbonates from the composition therein. Thus, for at least this reason, Applicants submit that instant claims 11-13 would not be anticipated by or rendered obvious by EP '008.

III. Rejection of Claims 1-4, 6 and 11-13 under 35 U.S.C. §102(b)/35 U.S.C. §103(a)

Claims 1-4, 6 and 11-13 are rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Dunkle.

As mentioned previously, claims 1 and 4 have been cancelled, and claims 2, 3, 6 and 8 have been amended to depend upon claim 11. Claim 11 has been amended to state that the thermoplastic polyester composition therein does not contain a polycarbonate and

to limit the ethylene copolymer (B) to those chosen from ethylene-unsaturated epoxide copolymers (B2).

Dunkle does not teach or suggest the use of an ethylene-unsaturated epoxide copolymer and does not teach or suggest its use as a component of an impact modifier. Instead, Dunkle teaches that the impact modifier is a combination of a core-shell polymer and a copolymer of an alpha-olefin having 2 to 8 carbon atoms and a monomer selected from an unsaturated carboxylic acid having 3 to 8 carbon atoms and salts and anhydrides thereof.

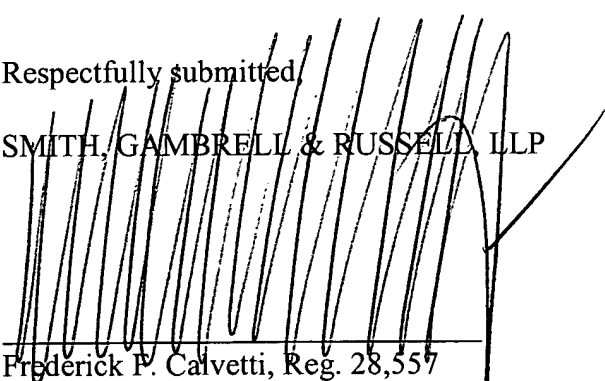
Because Dunkle does not teach the use of an ethylene-unsaturated epoxide copolymer as a component of the impact modifier therein, Applicants respectfully submit that the reference would not anticipate or render obvious instant claims 2, 3, 6, 8 and 11-13.

IV. Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully that the rejections set forth in the Office Action be withdrawn and that claims 2, 3, 6, 8 and 11-13 be withdrawn.

Respectfully submitted,

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Listing of Claims

Claim 1 (cancelled)

Claim 2 (currently amended): Compositions according to Claim + 11, wherein the polyester is selected from PET and PBT.

Claim 3 (currently amended): Compositions according to Claim + 11, comprising up to 30 parts by weight of copolyetherester per 100 parts of thermoplastic polyester.

Claim 4 (cancelled)

Claim 5 (cancelled)

Claim 6 (currently amended): Compositions according to Claim + 11, wherein the ethylene-unsaturated epoxide copolymers (B2) are ethylene-alkyl (meth)acrylate-unsaturated epoxide copolymers obtained by copolymerization of the monomers and contain from 0 to 40% by weight of alkyl (meth)acrylate and up to 10% by weight of unsaturated epoxide.

Claim 7 (cancelled)

Claim 8 (currently amended) Compositions according to Claim + 11, comprising, per 100 parts by weight, 75 to 95 parts of polyester for 25 to 5 parts of impact modifier, respectively.

Claim 9 (cancelled)

Claim 10 (cancelled)

Claim 11 (currently amended) A thermoplastic polyester composition not comprising polycarbonate, the composition comprising, by weight:

(i) a thermoplastic polyester;

(ii) an impact modifier comprising:

(a) a core-shell copolymer (A); wherein the core consists of one or more polymers selected from the group consisting of isoprene homopolymers, butadiene homopolymers, copolymers of isoprene with at most 30 mol% of a vinyl monomer, copolymers of butadiene with at most 30 mol% of a vinyl monomer, alkyl (meth)acrylate homopolymers, and copolymers of alkyl (meth)acrylate with at most 30 mol% of a vinyl monomer, the vinyl monomer in the core being selected from the group consisting of a styrene, an alkylstyrene and an alkyl (meth)acrylate; further wherein the shell consists of one or more polymers selected from the group consisting of styrene homopolymers, alkylstyrene homopolymers, methyl methacrylate homopolymers, and copolymers consisting of at least 70 mol% of a styrene, alkyl styrene or methyl methacrylate with at most 30 mol% of a vinyl acetate;

(b) an ethylene copolymer (B) chosen from ~~ethylene-unsaturated carboxylic acid anhydride copolymers (B1)~~, ethylene-unsaturated epoxide copolymers (B2) and blends thereof;

wherein the (B)/(A) ratio is between 90/10 and a value greater than 40/60 for proportions of impact modifier between 2 and 18% in 98 to 82% of polyester, respectively.

Claim 12 (previously added): A composition according to claim 11, wherein the composition consists of the thermoplastic polyester and the impact modifier.

Claim 13 (previously added): A composition according to claim 11, wherein the impact modifier consists of the core-shell polymer (A) and the ethylene copolymer (B).